

AMC'S NEW RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND

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Today, as we face new threats, our needs are changing. Just as the need for detecting hidden explosives or chemical or biological agents has become a priority, so too has ensuring that our soldiers have the most lethal weapons possible. Further, we must get technology out of the lab and into the field faster. What technologies do we pursue? How and where do we find them? It is vital that we optimize the benefits of technology by sharing across the old stovepipes. But are we organized to do so?

The Army Materiel Command (AMC) recently convened an advisory group to look at the Army's science and technology (S&T) enterprise regarding concerns that, although the Army planned to transform itself for the future, its S&T base was still aligned for World War II. During the war, the scientists and engineers working with the various

commodities restricted themselves to particular systems, which created an artificial barrier between technologies that could be complementary.

The senior leaders of the Army and its S&T enterprise as well as members of other Services, industry, academia, and the Department of Energy examined the Army's S&T community to substantially transform its business practices and structure to meet the needs of a transforming Army. It was and is essential to have the S&T vision in line with the Army's vision.

The advisory group returned with a proposal to create a new major subordinate command to guide and align AMC's S&T programs. This approach will enhance synergy across technology organizations, eliminate redundancy, improve the capability to do program

and system integration, and improve prioritization of programs.

In October 2002, we provisionally established the Research, Development and Engineering Command (RDECOM), which has three objectives. First, it will integrate research, development, and engineering across all areas of the Army, our sister Services, universities, and other S&T resources. Second, it will move emerging technology out of the labs and to soldiers faster. The third objective is to rapidly take advantage of opportunities no matter where they may arise. Achieving these objectives requires new and innovative approaches to all aspects of technology development for the soldier.

The first organizations assigned to the new RDECOM are the Army Research Laboratory, the Army Materiel Systems Analysis Activity, the International Cooperative Pro-

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grams Activity, the International Research and Development Standardization Groups, the Field Assistance in Science and Technology (FAST) Activity, the S&T portion of the Simulation, Training, and Instrumentation Command (STRICOM) (now Program Executive Office, STRI), and the S&T portion of HQ AMC. MG John C. Doesburg is leading the transition effort and defining the elements of the six research, development and engineering centers (RDECs) that will transfer to the command. (See RDEC list on Page 5.) We are planning on transferring the RDECs to the RDECOM by May 1, 2003.

The RDECOM leadership is establishing Memoranda of Understanding with both the U.S. Army Training and Doctrine Command (TRADOC) and the Army Test and Evaluation Command (ATEC) to increase coordination between these commands and the Army's S&T community. The relationship with TRADOC will include the full integration of Doctrine, Training, Leadership, Organization and Soldier considerations into the technology development and transition process. Similarly, the relationship with ATEC will include the comprehensive testing considerations of the integration of technology and technology programs to facilitate the rapid and effective development and transition of technology to the soldier and

maximum verification with modeling and simulation (M&S).

Deputy Commanding General BG Charles Cartwright will be the Systems-of-Systems Integrator of the new command. He will look at the capabilities the Army needs from a systems-of-systems perspective. For example, he will focus on supportability and lethality capabilities (instead of commodities such as helicopters or missiles), which will enable the scientists and engineers to integrate those technologies across multiple disciplines. In addition, the Systems-of-Systems Integrator will use M&S to reach across all the labs so that they can operate in a virtual environment from any location.

The RDECOM's M&S efforts will feed into the advanced collaborative environment. This virtual, distributed environment will link M&S, life-cycle costs, requirements, testing, and training. We are already using M&S in the Future Combat Systems acquisition process. This method of information sharing will continue to grow and become the means by which all of the Army shares concepts and breaks down organizational walls.

The days of single, independent platforms are coming to a close. The future will require each platform to be linked to all of the others. The only way we can learn to operate like that is to first build the M&S capabil-

ities. We will start with M&S and carry it through the acquisition process in a way that ensures the training devices and the systems are fielded together.

At the same time, AMC must integrate its university research through its new research centers that have been created to accelerate emerging concepts into technology that our soldiers can use. We must evaluate whether traditional methods of product development are needed or if we can spin off business units from these research centers to integrate them into the supply base. Finally, we need to fund research and engineering throughout the weapon systems' life cycles to prolong their longevity and integrate systems-of-systems benefits into our legacy platforms.

I see the RDECOM as a key part of the Army's process to transform itself. We are breaking down old barriers. Transforming the way we acquire and develop technology for our soldiers is a step farther down that road.

In this issue of *Army AL&T* magazine, several authors have contributed examples of how the new RDECOM will optimize the benefits of technology to further Army transformation.

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